Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Teacher: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Science Study Guide – Pluto**

**Test: Friday, Oct. 20, 2017**

***Pluto: Basic Facts***

1. Pluto’s discovery
2. Dwarf planet
3. Kuiper Belt
4. Pluto’s orbit
5. Pluto’s moons
6. Plutoid
7. What is Pluto like?
8. New Horizons
9. Why does NASA explore Pluto?
10. How many miles from the sun is Pluto?
11. How many miles wide is Pluto?
12. What is the temperature on Pluto in degrees Fahrenheit?
13. If you weigh 60 lbs. on Earth, how much would you weigh on Pluto?

***Is Pluto A Planet?***

1. What is the IAU and what did they do?
2. Owen Gingerich

***NOVA: Chasing Pluto***

1. Know all of the questions on the “Chasing Pluto” viewing guide completed in class.
2. New definition of “planet”

***60 Minutes: Spectacular Revelations Courtesy of Hubble***

1. Know the information on the viewing guide completed in class.

***Comparing the Hubble and James Webb space telescopes***

1. Know the information discussed in class and written into your Venn diagram.

**JAMES WEBB**

* Positioned 1 million miles from Earth at L2
* Primary mirror has 18 segments, 21.3 ft. in diameter
* Too far from Earth to be fixed by astronauts
* Will take 1 month to reach L2 orbital point
* Mirror mass = 608 lbs.
* Mission: 5-10 years, limited by fuel

**BOTH**

* Both located above Earth’s atmosphere
* Both use mirror to collect and focus light
* Both use solar panels to collect sunlight as a source of power

**HUBBLE**

* Orbits Earth every 95 minutes at a height of 340 miles
* Primary mirror is a single glass – 94.5 inches in diameter
* Designed to be fixed by astronauts
* Placed in Earth’s orbit by astronauts on space shuttle Discovery
* Mirror mass = 1,825 lbs.
* Mission: more than 27 year